

Section E

Water Pollution, Noise and Solid Waste

Table 4-50

Petroleum Oil Spills Impacting Navigable U.S. Waters^a

	1985		1990		1995		1996		1997		1998		1999	
Source	Incidents	Gallons Spilled	Incidents	Gallons Spilled	Incidents	Gallons Spilled	Incidents	Gallons Spilled	Incidents	Gallons Spilled	Incidents	Gallons Spilled	Incidents	Gallons Spilled
Vessel Sources														
Tankship	164	732,397	249	4,977,251	148	125,491	122	219,311	124	22,429	104	56,673	92	8,414
Tank barge	385	3,683,548	457	992,025	353	1,101,938	313	1,163,258	252	165,649	220	248,089	227	158,977
Other vessels ^a	1,113	446,966	1,779	417,882	4,977	396,724	5,151	298,451	4,971	192,801	4,848	316,473	5,361	409,084
Total vessel sources	1,662	4,862,911	2,485	6,387,158	5,478	1,624,153	5,586	1,681,020	5,347	380,879	5,172	621,235	5,680	576,475
Nonvessel sources														
Offshore pipelines	23	17,977	73	46,228	7	1,143	4	386	13	810	10	843	5	35,707
Onshore pipelines	362	759,040	76	270,700	23	10,751	13	978,006	19	223,312	35	47,020	20	433
Other ^b	2,417	2,473,212	2,435	1,091,544	1,086	946,328	1,061	429,911	1,324	227,143	1,508	198,853	1,590	515,241
Total nonvessel sources	2,802	3,250,229	2,584	1,408,472	1,116	958,222	1,078	1,408,303	1,356	451,265	1,553	246,716	1,615	551,381
Mystery^c	1,705	323,108	3,108	119,377	2,444	55,854	2,671	28,508	1,921	60,430	1,590	17,352	1,244	44,593
Total All Spills	6,169	8,436,248	8,177	7,915,007	9,038	2,638,229	9,335	3,117,831	8,624	892,574	8,315	885,303	8,539	1,172,449

^a Other vessels include commercial vessels, fishing boats, freight barges, freight ships, industrial vessels, oil recovery vessels, passenger vessels, unclassified public vessels, recreational boats, research vessels, school ships, tow and tug boats, mobile offshore drilling units, offshore supply vessels, publicly owned tank and freight ships, as well as vessels not fitting any particular class (unclassified).

^b Other nonvessel sources include designated waterfront facilities, nonmarine land facilities, fixed offshore and inshore platforms, mobile facility, municipal facility, aircraft, land vehicles, railroad equipment, bridges, factories, fleeting areas, industrial facilities, intakes, locks, marinas, MARPOL reception facilities, nonvessel common carrier facilities, out falls, sewers, drains, permanently moored facilities, shipyards, ship repair facilities.

^c Mystery spills are spills from unknown or unidentified sources. U.S. Coast Guard investigators are unable to identify the vessel or facility that spilled the oil into U.S. navigable waters.

SOURCE: U.S. Coast Guard, Oil Spill Compendium 2000, available at Internet site www.uscg.mil/hq/g-m/nmc/response/stats/aa/htm.

Table 4-51 Leaking Underground Storage Tank Releases and Cleanups

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total confirmed releases	87,528	127,195	184,457	237,022	270,567	303,635	317,488	341,773	371,387	397,821
Cleanups initiated	51,770	79,506	129,074	171,082	209,797	238,671	252,615	292,446	314,965	346,300
Cleanups not initiated	35,758	47,689	55,383	65,940	60,770	64,964	64,873	49,327	56,422	51,521
Cleanups completed	16,905	26,666	55,444	87,065	107,448	131,272	152,683	178,297	203,247	228,925
Releases not cleaned up	70,623	100,529	129,013	149,957	163,119	172,363	164,805	163,476	168,140	168,896

NOTE: All numbers are cumulative.

1998-99: Ibid., Internet site <http://www.epa.gov/swrust1/cat/camarchv.htm>, as of June 27, 2000.

SOURCES: 1990-97: U.S. Environmental Protection Agency, Office of Underground Storage Tanks, personal communications, Nov. 17 and Nov. 18, 1998.

Table 4-52 Highway Noise Barrier Construction (Miles)

	Unknown	^R 1970-79	^R 1980-89	^R 1990	^R 1995	1996	1997	1998	Total 1970-98
Type I barriers ^a	6 ^d	102	419	44	87	34	47	114	1,146
Type II barriers ^b	0	70	128	19	32	15	31	22	391
All other types ^c	N	2	28	0	6	0	1	1	79
Total length	6	175	575	63	125	49	78	137	1,623
Cost (1998 \$ millions)	N	134	656	89	152	60	111	169	1,931

^a A Type I barrier is built on a highway project to construct a new highway or to physically alter an existing highway.

^b A Type II barrier is built to abate noise along an existing highway (often referred to as retrofit abatement) and is not mandatory.

^c All other types of barriers are nonfederally funded.

^d Have not been assigned a year of construction or a cost.

NOTES: Miles have been converted from kilometers. Totals may not match the sum of yearly estimates due to rounding and converting from metric. Twenty-four miles of barriers, while

assigned a year of construction, cannot be assigned a cost. Data are produced on a 3-year cycle.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, *Highway Traffic Noise Barrier Construction Trends* (Washington, DC: 2000), tables 1 and 3.

KEY: N = data do not exist; R = revised

Table 4-53

**Number of People Residing in
High Noise Areas around U.S.
Airports^{a,b,c} (within 65 dB
DNL noise level contours)**

Year	Exposure		U.S. Resident Population (millions)
	People (millions)	Percent of U.S. Resident Population	
1975	7.0	3.2	215.5
1980	5.2	2.3	227.2
1985	3.4	1.4	237.9
1990	2.7	1.1	249.4
1995	1.7	0.6	262.8
1996	1.6	0.6	265.2
1998	1.1	0.4	270.3

Key: db=decibels; DNL=day night sound level

^a Noise-level contours are graphical representations of noise levels on a map, similar to elevation contours on a topographic map. Noise-level contours are lines that join points of equal sound levels. Areas between given noise-level contour lines would have a noise level between the two contour values. The U.S. Department of Transportation, Federal Aviation Administration (FAA) has identified FNL 65 dB as the highest threshold of airport noise exposure that is normally compatible with indoor and outdoor activity associated with a variety of land uses, including residential, recreational, schools, and hospitals.

^b Estimates are for areas surrounding airport property of 250 of the largest civil airport with jet operations in the United States. They exclude exposure to aircraft noise within an airport boundary.

^c 1975 exposure estimates were made by the U.S. Environmental Protection Agency. 1980-99 estimates were made by FAA. See the source and accuracy statement for more details on how exposure estimates are made.

SOURCES:

Exposure: U.S. Department of Transportation, Federal Aviation Administration, Office of Environment and Energy (AEE-12), personal communications.

Population: U.S. Department of Commerce, Census Bureau, *Statistical Abstract of the United States 1999* (Washington, DC: 2000), table 2.

Table 4-54 Motor Vehicles Scrapped^a (Thousands)

	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999
Passenger cars	7,461	5,669	8,405	7,729	8,897	7,414	7,527	8,244	6,819	7,216
Trucks	837	908	1,732	2,100	2,177	2,918	3,284	4,265	4,846	4,447
Total motor vehicles	8,298	6,577	10,137	9,829	11,074	10,332	10,811	12,509	11,665	11,664

^a Data are for the period July 1 to June 30 of the given year.

SOURCE: The Polk Co., personal communication, May 4, 2000.

NOTE: Figures represent vehicles that are not re-registered.